

## Supplemental Material

# Comparison of Current-Use Pesticide and Other Toxicant Urinary Metabolite Levels among Pregnant Women in the CHAMACOS Cohort and NHANES

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**6 pages, 2 tables, 3 figures**

**Supplemental Material, Table 1.** Spearman rank sum and intraclass correlation between the CHAMACOS 1<sup>st</sup> and 2<sup>nd</sup> prenatal samples for frequently detected analytes (Average DF>50%).

Analyte	Precursor compound(s)	Average DF (%)	n	ICC <sup>a</sup>	Spearman rho	Spearman p-value
2,4-Dichlorophenol (2,4-DCP)	Lindane (or hexachlorocyclohexane, HCH)	55.9	455	0.15	0.11	0.02
2,5-Dichlorophenol (2,5-DCP)	Lindane (HCH); 1,4-dichlorobenzene	51.3	456	0.30	0.31	<0.0001
1-Naphthol	Carbaryl, Naphthalene	70.0	453	0.03	0.01	0.80
2-Naphthol	Naphthalene	67.5	455	0.25	0.26	<0.0001
<i>para</i> -Nitrophenol (PNP)	Parathion; methyl parathion	54.6	471	0.14	0.17	0.0002
<i>ortho</i> -Phenylphenol (ORTH)	Sodium orthophenylphenate	56.1	456	0.02	0.004	0.93
2,4,6-Trichlorophenol (2,4,6-TCP)	Lindane, HCB and pentachlorophenol	65.1	455	0.03	0.09	0.05
3,5,6-Trichloro-2-Pyridinol (TCPy)	Chlorpyrifos; chlorpyrifos methyl	76.3	471	0.15	0.17	0.0003

Note: Detection frequencies are the average of the first and second prenatal samples.

<sup>a</sup> We calculated intraclass correlation coefficients (ICCs) using log transformed metabolite levels.

**Supplemental Material, Table 2.** Urinary metabolite correlations within CHAMACOS (n=538) and NHANES (n=224) prenatal samples.

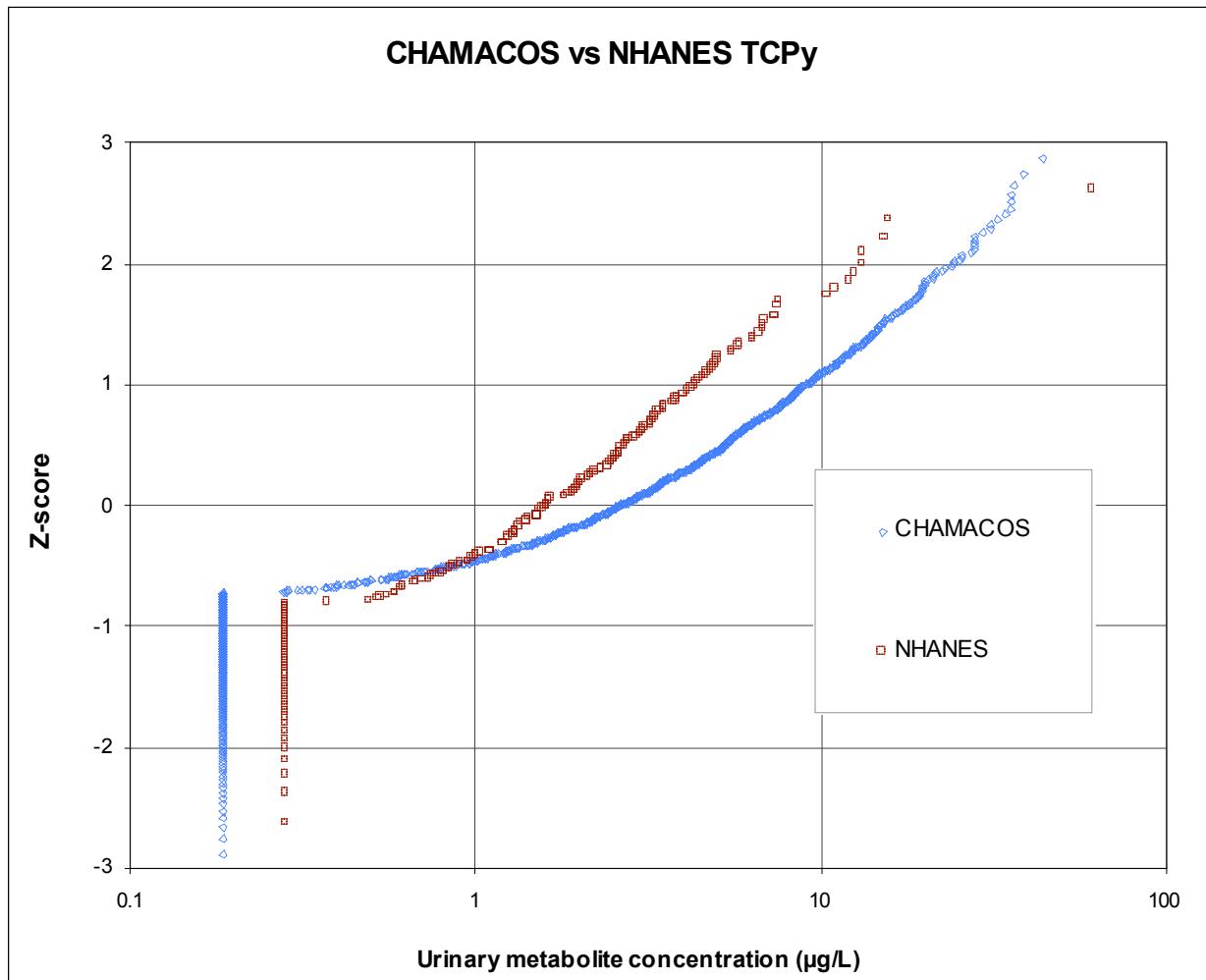
Spearman Correlations									
Prenatal	Sample	2,4,6-TCP	2,4-DCP	2,5-DCP	TCPy	ORTH	PNP	1-naphthol	2-naphthol
2,4,6-TCP	(1)	1.00							
	(2)	1.00							
	NHANES	1.00							
2,4-DCP	(1)	0.13*	1.00						
	(2)	0.16*	1.00						
	NHANES	0.29*	1.00						
2,5-DCP	(1)	0.12*	0.61*	1.00					
	(2)	0.17*	0.65*	1.00					
	NHANES	0.25*	0.53*	1.00					
TCPy	(1)	0.66*	0.12*	0.11*	1.00				
	(2)	0.42*	-0.01	-0.05	1.00				
	NHANES	0.55*	0.19*	0.19*	1.00				
ORTH	(1)	-0.03	0.20*	0.02	-0.13*	1.00			
	(2)	0.19*	0.14*	0.13*	0.04	1.00			
	NHANES	0.04	0.20*	0.13*	-0.04	1.00			
PNP	(1)	0.24*	0.15*	0.08	0.32	-0.05	1.00		
	(2)	0.03	0.01	-0.05	0.30*	-0.08	1.00		
	NHANES	0.17*	0.23*	0.12	0.25*	0.19*	1.00		
1-naphthol	(1)	0.08	0.10*	0.04	-0.06	0.37	-0.09*	1.00	
	(2)	0.22*	0.07	0.17*	-0.05	0.31*	-0.22	1.00	
2-naphthol	(1)	0.25*	0.29*	0.16*	0.18*	0.28*	0.02	0.40*	
	(2)	0.29*	0.13*	0.21*	0.09	0.11*	-0.11*	0.55*	1.00

\* Spearman p-value<0.05

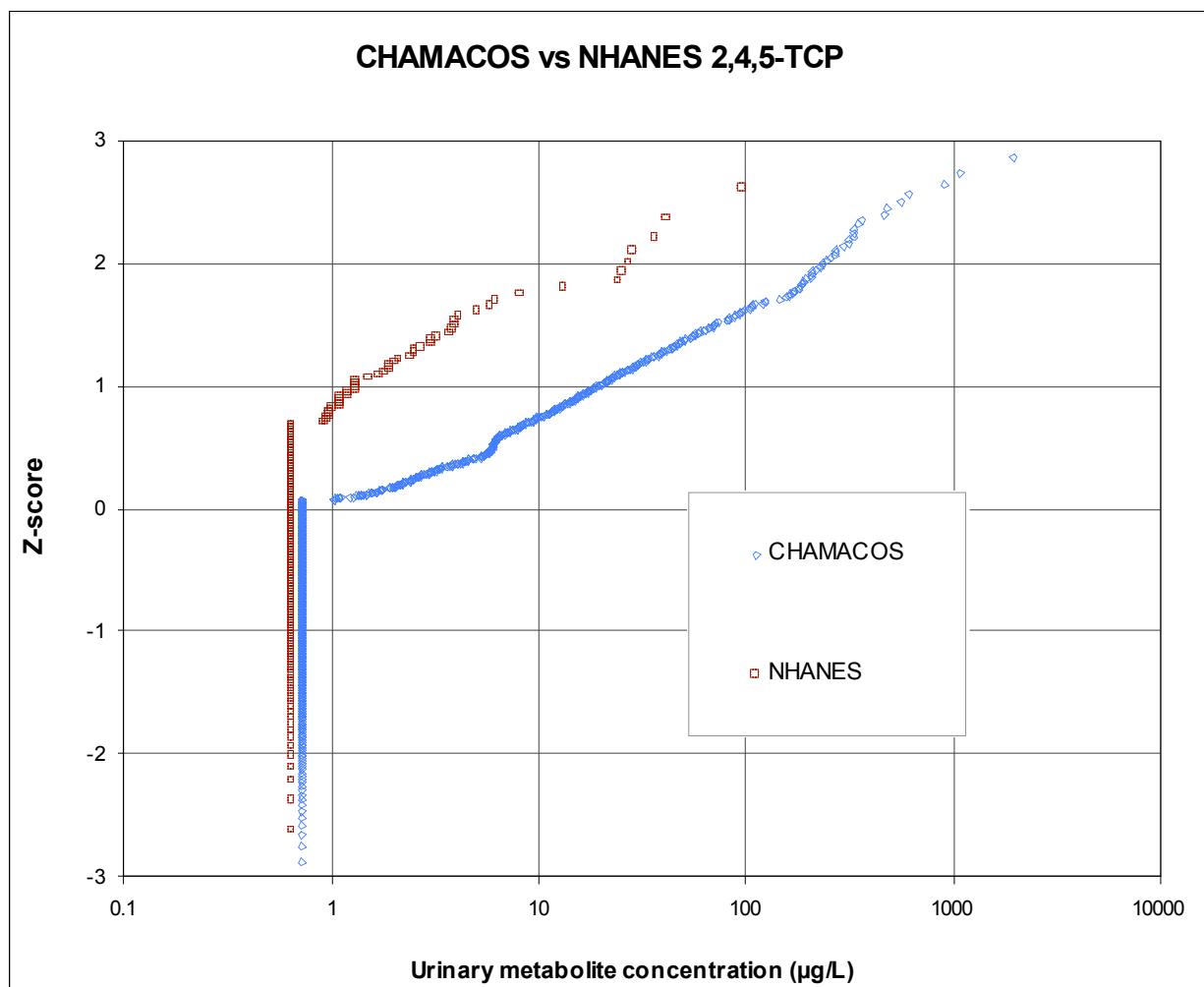
<sup>a</sup> CHAMACOS prenatal sample 1 was collected during the first trimester of pregnancy (~13 weeks gestation) and prenatal sample 2 was collected during the second trimester of pregnancy (~26 weeks gestation). The NHANES prenatal samples were collected at approximately 24 weeks gestation (mean = 24.4 weeks (sd=9.5)).

<sup>b</sup> 1- and 2-naphthol are not included for NHANES because urine sample collection for the other metabolites came from a different sample of NHANES 2001-2002 pregnant women. NHANES 1- and 2-naphthol levels (n=118) were significantly correlated ( $\rho=0.56$ ,  $p<0.001$ ).

**Supplemental Material, Figure 1.** Plotted z-scores for combined 1<sup>st</sup> and 2<sup>nd</sup> prenatal CHAMACOS (n=1,019) and NHANES (n=224) urinary TCPy concentrations.



**Supplemental Material, Figure 2.** Plotted z-scores for combined 1<sup>st</sup> and 2<sup>nd</sup> prenatal CHAMACOS (n=1,019) and NHANES (n=224) urinary 2,4,5-TCP concentrations.



**Supplemental Material, Figure 3.** Plotted z-scores for combined 1<sup>st</sup> and 2<sup>nd</sup> prenatal CHAMACOS (n=1,019) and NHANES (n=224) urinary 2,5-DCP concentrations.

